What is claimed is:

1. A powder fabricating apparatus comprising:

a barrel wherein an inlet and an outlet are formed at both opposite ends thereof, respectively;

a screw which is rotationally mounted in the barrel and by which reactant supplied from the inlet moves toward the outlet;

a driving portion for causing a relative rotational motion between the screw and the barrel;

reaction control means for controlling reaction conditions of the reactant which moves in the barrel; and

a controller for controlling the driving portion and the reaction control means.

2. The powder fabricating apparatus according to claim 1, wherein said reaction control means comprises a temperature control device.

3. The powder fabricating apparatus according to claim 1, wherein said reaction control means comprises an electron supply device for applying electrons into the barrel.

4. The powder fabricating apparatus according to claim 1, wherein said reaction control means comprises a concentration control device for controlling concentration of the reactant in the barrel.

5. The powder fabricating apparatus according to any one of claims 1 to 4, further comprising at least one atmosphere providing device for providing a predetermined reaction atmosphere into said barrel.

6. The powder fabricating apparatus according to claim 5, wherein said atmosphere providing device provides a vacuum, inert, oxidizing, reducing, vacuum inert, vacuum oxidizing, or vacuum reducing atmosphere.

7. The powder fabricating apparatus according to any one of claims 1 to 4, wherein said barrel is separated into plural zones, said reaction control means are mounted in the predetermined zones, and said controller controls said reaction control means independently at each zone so that the reaction condition of the reactant is independently controlled in each zone.

8. The powder fabricating apparatus according to claim 7, wherein said barrel is

separated into four zones: a nuclei generating zone, a reaction buffering zone, a major reaction zone and a grain ripening zone, and said reaction control means provides each zone with the reaction condition corresponding thereto.

9. The powder fabricating apparatus according to any one of claims 1 to 4, wherein said barrel is provided with plural sensors for measuring reaction status, and said controller controls said reaction control means on the basis of the status measured from the sensors.

10. The powder fabricating apparatus according to any one of claims 1 to 4, wherein the surface of the groove of said screw is provided with plural projections.

11. The powder fabricating apparatus according to any one of claims 1 to 4, wherein plural screws are mounted parallel in said barrel.

12. The powder fabricating apparatus according to any one of claims 1 to 4, wherein the groove diameter of said screw changes along an axial distance of said screw.

13. The powder fabricating apparatus according to any one of claims 1 to 4, wherein the distance between two adjacent grooves, also known as pitch, changes along an axial distance of said screw.

14. The powder fabricating apparatus according to any one of claims 1 to 4, wherein a reactant feeder is connected to said inlet, and a mixer is provided in said reactant feeder in order to mix the reactant.

15. The powder fabricating apparatus according to any one of claims 1 to 4, wherein a collector is connected to said outlet, and a condenser is provided in said collector in order to collect material which has a low boiling point or non-reactant by evaporating and condensing it.

16. A method for fabricating powder comprising steps of:

injecting reactant into a reactor;

causing the reactant to react continuously at the same time while it is mixed and moves spirally in the reactor;

ripening and cooling the reactant while it moves spirally in the reactor after the reaction is completed; and

discharging product after the reaction and cooling are completed.

17. The method according to claim 16, wherein said step of causing the reactant to react continuously comprises a step of causing the reactant to move through a nuclei generating

zone, a reaction buffering zone, and a major reaction zone, wherein each of the reaction conditions are controlled independently.

18. The method according to claim 16 or 17, wherein said reactor has separate reaction spaces that are connected with each other, and reaction occurs while the reactant moves through said reaction spaces.